RMT
www.rmtinc.com

2025 E. Beltline Ave. SE, Suite 402
Grand Rapids, MI 49546
Telephone: 616-975-5415
Fax: 616-975-1098

July 25, 2007

Mr. Glenn Savary
Case Manager
New Jersey Department of Environmental Protection
Bureau of Case Management
CN028
Trenton, NJ 08625

Subject: L.E. Carpenter and Company Superfund Site, NJD002168748
Response to Remedial Action Report (RAR) regulatory comment outlined in the NJDEP email dated July 13, 2007

Dear Mr. Savary:

RMT, Inc., (RMT) on behalf of our client L.E. Carpenter & Company (LEC), has prepared this letter with attachments to respond to the comment raised in the New Jersey Department of Environmental Protection (NJDEP) email dated July 13, 2007 [attached] prepared following regulatory review and response to the RAR response to comment letter prepared by RMT dated August 25, 2006 [attached]. Specifically, as requested in the July 13, 2007 email, RMT revised the legends on both RAR Figures 8 and 9 [attached] to show the connection between the location of the LNAPL smear zone excavation and the subsurface slurry monolith.

Please contact me at (616) 975-5415 with further questions.

Sincerely,

RMT, Inc.

Nicholas J. Clevett
Senior Project Manager

Attachments NJDEP Email dated July 13, 2007
RMT RAR Response to Comment Letter dated August 25, 2006
Revised RAR Figures 8 & 9

cc: Michelle Granger, USEPA
Ernie Schaub, LEC
Cris Anderson, LEC
Jim Dexter, LEC
Central Files

**From:** "Glenn Savary" <Glenn.Savary@dep.state.nj.us>
**To:** <Nicholas.Clevett@rmtinc.com>
**Date:** 7/13/2007 2:58 PM
**Subject:** LE Carpenter Response to NJDEP Comments 6/14/06

Nick,
In order for the DEP to issue an unconditional approval for the Noember 2005 RAR, RMT should address the following comment. The DEP is giving you this opportunity to address this concern in lieu of a NOV. FYI: The DEP's June 2006 letter is considered to be a NOD.

COMMENT

1.) Smear Zone Excavation and Management, page 8-9
Contrary to the LEC response, the figures in the RAR do not specifically describe the monolith area. The legend on the figures refers to the "area where the LNAPL smear zone was excavated". It is not clear on the figures, nor is it specifically stated in the RAR that the entire smear zone excavation coincides with the location of the monolith material. The area that encompasses the monolith material must be documented so that future use of the site leaves the subsurface material undisturbed.

If you have any questions just give me a call. Thanks.

Glenn

---

Glenn Savary, Case Manager
NJDEP/DRMR/RRE/BCM
609-633-0835
609-633-1439 (fax)

---

RMT
Integrated
Environmental
Solutions

2025 E. Beltline Ave. SE, Suite 402
Grand Rapids, MI 49546
Telephone: 616-975-5415
Fax: 616-975-1098

FILE COPY

August 25, 2006

*Via Overnight Delivery*

Mr. Glenn Savary
Case Manager
New Jersey Department of Environmental Protection
Bureau of Case Management
CN028
Trenton, NJ 08625

Subject: L.E. Carpenter and Company Superfund Site, NJD002168748
Response to Remedial Action Report (RAR) regulatory comments outlined in the NJDEP letter dated June 14, 2006

Dear Mr. Savary:

RMT, Inc., (RMT) on behalf of our client L.E. Carpenter & Company (LEC), has prepared this letter to respond to the New Jersey Department of Environmental Protection (NJDEP) and United States Environmental Protection Agency (USEPA) comment letter dated June 14, 2006 prepared following regulatory review of the report entitled *Remedial Action Report Source Reduction* (RMT, November 2005). This response has been formatted to mirror the outline of the June 14, 2006 NJDEP comment letter to facilitate regulatory review.

## General Comment (USEPA)

LEC understands that the USEPA has only agreed to evaluate the feasibility and possibility of Monitored Natural Attenuation (MNA) as a potential alternative to the current 1994 Record of Decision (ROD) required remedial methodology for impacted shallow groundwater [*i.e.*, ROD Alternative No. 4 - Ground Water Treatment with Reinfiltration /Soil Bioremediation"). LEC would like to reiterate that these MNA feasibility evaluations are on-going.

The USEPA and NJDEP approved the proposed MNA sampling activities (Ref. NJDEP letter dated January 24, 2002) outlined in the document entitled *Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater* (RMT, May 2001) ("the MNA workplan") and *Addendum for the Workplan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater* responding to regulatory comments outlined in the NJDEP letter dated August 23, 2001. These NJDEP and USEPA approved MNA sampling activities were initiated in 2nd quarter 2004 (2Q04). MNA specific data has been reported within each quarterly monitoring report beginning with the 2Q04 monitoring report. In June 2006 LEC installed eight of the thirteen groundwater monitoring wells proposed in the report entitled *Post Remedial Monitoring Plan (PRMP)* (RMT, Oct 2005). Development of a PRMP was required as a condition of approval to implement the source reduction remedial project. The remaining five groundwater monitoring wells are proposed for installation within the wetland area located to the east of the LEC site. LEC is in the process of

acquiring a GP-14 permit from the NJDEP Land Use Regulation Program (LURP) to install these five remaining groundwater monitoring wells in the wetland area. Sampling specifics (*i.e.*, monitoring locations, analyses, data quality objectives *etc.*) for the post source reduction monitoring system are detailed in the PRMP. LEC will submit a PRMP Implementation Report documenting the installation of the post remedial monitoring system and discussing the baseline monitoring results once the five remaining wetland monitoring wells have been installed following LURP permit approval.

The viability of MNA at the LEC site will be determined by comprehensive evaluation of 1) MNA specific data (*i.e.*, existing sampling data, PRMP baseline results, and subsequent quarterly monitoring results) and 2) groundwater modeling results. As previously agreed, LEC will solicit input from both NJDEP and USEPA regarding the MNA model inputs and general framework. If all parties agree that MNA has been proven viable in the long term, these data will be memorialized into a MNA feasibility study (FS) that will propose a permanent change to the 1994 ROD remedial approach for shallow groundwater via a ROD Amendment.

## Specific Comments (NJDEP

1. **Section 6.6, Rockaway River and Drainage Ditch, page 6-4**: Use of the absorbent booms and sweeps and the subsequent biweekly monitoring and change out at the site was implemented within 24 hours of discovering seeps of product sheen on May 21, 2004. Because some small "patches" of sheen were observed breaking away from small areas of flooding within the wetland area and at one point mingling with the active current of the river, this situation was reported as required to the National Response Center as "intermittent sheen on surface water", and the booms were emplaced as an interim engineering control until the source reduction remedial action was complete. No evidence of sheen was noted in the days and weeks following finalization of the source reduction remedial action, as well as the follow-up site visit with the LURP and the wetlands subcontractor in 2005, and therefore biweekly monitoring and change out of absorbent booms was discontinued. Visual observations of surface water and laboratory test results for surface water samples collected during the 2nd quarter of 2006 (2Q06) sampling event show no LNAPL sheen and no dissolved-phase concentrations of site contaminants migrating into the Rockaway River. LEC will continue to evaluate these areas on a quarterly basis and will remobilize an emergency response subcontractor and implement similar temporary controls if any visible sheen in both the ditch and river seep areas are observed to be actively migrating into the river. Surface water sampling in both the ditch and the river will continue on a quarterly basis as outlined in the PRMP.
2. **Smear Zone Excavation and Management, page 8-9**: The as-built lateral extents of the slurry monolith were provided on RAR Figure 8, and both lateral and vertical extents of the slurry monolith were provided on RAR Figure 9. The thick dashed green line [as defined in the legend

of each figure] indicates the as-built lateral extent of the slurry monolith. Additional material was excavated under the slurry as depicted by the green hatched areas shown on the south west and west sides of the excavation [Ref. Figures 8 and 9]. The lateral extents of the monolith as depicted by the dashed green line were developed from professional survey data presented in Table 3 [Ref. Smear Zone Excavation Extent data]. As outlined in Section 8.10.1, the vertical extent of the slurry was segregated into 17 sub areas [Ref. Figure 5]. The vertical extent of the smear zone excavation within each of these areas was developed from the December 2004 preconstruction boring data and were approved by NJDEP and USEPA during *Remedial Action Work Plan for Source Reduction (RAWP)* (RMT, April 2004) review and conditional approval. The field method approved for implementation at the LEC site during this excavation to ensure the adequate excavation depths for the smear zone (as defined by the elevation ranges shown on Figure 5) is discussed in Section 8.10.1 [Depth Master].

3. **Section 8.10.2, Smear Zone Slurry Excavation, page 8.10:** Post remedial permeability and leachability testing of the slurry monolith were not required as a condition of source reduction implementation approval. Therefore, no permeability/leaching data were collected in the field while implementing the source reduction remedial action. Data and observations obtained during the installation of PRMP wells through the slurry floor (June 2006) demonstrate that the slurry floor has a very low permeability as evidenced by visually observed temporary perching/ponding of rainfall, and the dry characteristic of the slurry sampled as part of the cuttings derived from the sonic drill rig. The material cured sufficiently in the field to handle the weight of heavy equipment. In addition, data that can be used to evaluate potential leaching of contaminants out of the bottom of the slurry floor will be provided in the groundwater data collected from wells installed as part of the PRMP and screened across the base of the monolith.

4. **Smear Zone**: As outlined in RAR Section 6.2, vertical delineation of the smear zone was documented in the *Pre-Construction Boring Report* (RMT, January 2005). As outlined in Section 5.2 of the RAWP "**The target design depth for the base of the excavation is elevation 622. Based on record seasonal low water tables the vast majority of residual product, and all free-floating product should be above this depth (Ref. RAWP Appendix L).** However, data obtained from the pre-construction borings show that product was deeper than the 622 elevation in certain areas (areas that corresponded strongly to known and suspected points of original releases of LNAPL product to the subsurface). As a result of the preconstruction borings, 14 of the 17 sub areas were excavated deeper to elevations lower than 622 (as shown on RAR Figure 5). The actual excavation-bottom depths ranged from a minimum elevation of 615 to a maximum elevation of 622. Because the smear zone was more accurately defined vertically, and significant additional volumes of smear zone soils were removed from the site, the remedial excavations resulted in a more robust and thorough LNAPL source reduction.

If you have any questions regarding these responses to RAR comments, please contact me at (616) 975-5415.

Sincerely,

RMT, Inc.

Nicholas J. Clevett
Senior Project Manager

Attachments: NJDEP RAR Comment Letter

cc: Stephen Cipot, USEPA
Cris Anderson, LEC
Ernie Shaub, LEC
Jim Dexter, RMT
Central Files

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE
*Governor*

LISA P. JACKSON
*Commissioner*

Christopher Anderson
Director Environmental Affairs
L.E. Carpenter and Company
33587 Walker Road
Avon Lake, OH 44012

JUN 14 2006

Re: L.E. Carpenter Superfund Site
Wharton Borough, Morris County, New Jersey

The New Jersey Department of Environmental (NJDEP or Department) and the United States Environmental Protection Agency (USEPA) have completed a review of the Remedial Action Report (RAR) dated November 18, 2005. This document was prepared by RMT, Inc. on behalf of L.E. Carpenter and Company (LE). The document was found to be conditionally acceptable provided the following comments are adequately addressed.

**General Comment (USEPA):**

LE should note that there should be nothing in the RAR that implies or states that MNA has been agreed to as an alternate remedial strategy for groundwater contamination for this site, either in the remediated area, nor in the MW-19 area. It should also be noted that the contaminant concentrations remaining in the MW-19 area remain high. To date, it is also not known what the "residual" concentrations are in the remediated areas. The USEPA has only agreed to consider and evaluate the feasibility or possibility of MNA as an alternative at this site, and this must be based on an acceptable monitoring well network being installed and the proper rounds of groundwater monitoring and sampling for all MNA parameters. LE should be aware that the USEPA may or may not accept MNA as an alternative for this site.

**Specific Comments (NJDEP):**

Section 6.6, Rockaway River and Drainage Ditch, page 6-4: The RAR states that maintenance activities at the seep area discharge points along the drainage ditch and Rockaway river were terminated and all booms and sweeps were removed. Clarification is needed as to when the sheen or observed discharge disappeared and whether or not the disappearance was the result of the completed source remediation. The NJDEP still has concerns about these areas. LE must confirm the status of the discharges and provide a discussion of what action will be taken if contaminant levels in surface water persist. Surface water sampling at the discharge points shall be added to the post remedial quarterly monitoring and sampled quarterly thereafter.

Smear Zone Excavation and Management page 8-9: A map or diagram that clearly shows the final plane view or horizontal extent of the subsurface slurry monolith must be provided. The area that encompasses the monolith material must be documented so that future use of the site leaves the subsurface material undisturbed.

Section 8.10.2, Smear Zone Slurry Excavation, page 8-10: The Report states that the slurry was self hardening and achieved high strength and low permeability over a period of days. There is no data provided in the report to substantiate the above. LE should provide testing results of the final cured material as well as leaching data if contaminants were stabilized within the monolith.

Smear Zone: LE was required to excavate contaminated soil, waste and product to the level of the lowest recorded ground water elevation. It appears that this requirement was not satisfied. Accordingly, ground water remediation may be compromised and require additional time to achieve the cleanup standards. Implementation of additional ground water remedial technologies may be required to achieve this goal.

Should you have any questions please contact me at (609) 633-1416.

Sincerely,

Anthony Cinque, Case Manager
Bureau of Case Management

C: Jon Rheinhardt, Adminstrator/CFO, Borough of Wharton
Nicholas Clevett, RMT, Inc.
Steve Cipot, USEPA
George Blyskun, BGWPA
John Prendergast, BEERA